

Abstract of the Disclosure:

Reduction of cogging torque and torque pulsation in
5 the rotor with permanent magnets embedded therein. In a
rotating electrical machine comprising a stator 5 with an
armature winding wound on the stator core and a rotor 1
with permanent magnet 2 embedded in the rotor core 9, a
magnetic flux short circuit preventive hole 3 radially
10 extending from the circumferential ends of the permanent
magnets 2 (in the vicinity of q-axis) to the vicinity of
outer periphery of the rotor core is further extended
toward the d-axis (circumferential direction). At the
same time, the distance between the outer periphery of the
15 magnetic flux short circuit preventive hole 3 and that of
the rotor core is increased gradually in conformity to the
approach to d-axis side from q-axis.

[Selected Figure] Fig. 1